



**W. Jeff Koskie**  
***Pipeline Safety and Compliance***  
***Manager***  
55 W. Fifth Street, M.L. GT-11A6  
Los Angeles, CA 90013  
Phone: 213 305-8660  
Fax: 213-244-8223

July 20, 2016

Mr. Kenneth Bruno  
Program Manager  
Gas Safety and Reliability Branch  
Safety and Enforcement Division  
California Public Utilities Commission  
320 W. Fourth Street, Suite 500  
Los Angeles, CA 90013

Dear Mr. Bruno:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a G.O. 112<sup>1</sup> Operation and Maintenance Inspection of Southern California Gas Company's (SCG) Cathodic Protection (CP) Facilities in the Orange North (Inspection Unit) on June 8-12, 2015. The inspection included a review of the Inspection Unit's cathodic protection and odorant records for calendar years 2013 and 2014 and random field inspections of pipeline facilities in Bakersfield and Visalia districts. SED staff also reviewed the Inspection Unit's Operator Qualification records, which included field observation of randomly selected individuals performing covered tasks.

SED staff did not identify any probable violation of G.O. 112<sup>1</sup>, Reference Title 49 Code of Federal Regulations (CFR), Part 192 during the course of this inspection. However, SED found several concerns as described in the "Summary of Inspection Findings", which is enclosed with this letter.

Attached are our responses to areas of concern identified during your inspection.

Please feel free to contact me at (213) 305-8660 if you have any questions or need additional information.

Sincerely,

W. Jeff Koskie

Attachments

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<sup>1</sup> General Order 112-F was adopted by the Commission on June 25, 2015 via 15-06-044

**Summary of Inspection Findings  
2015 SCG Orange North Inspection  
June 8 - 12, 2015**

**I. Concerns, Recommendations, and Observations Summary**

**1. §192.463 (a) External corrosion control: Cathodic protection.**

*“Each cathodic protection system required by this subpart must provide a level of cathodic protection that complies with one or more of the applicable criteria contained in [Appendix D](#) of this part. If none of these criteria is applicable, the cathodic protection system must provide a level of cathodic protection at least equal to that provided by compliance with one or more of these criteria.”*

During field inspection of CP facilities, SED observed that the pipe-to-soil reads at the following location as shown in the table were out of tolerance (low P/S reads) from its -0.850 volts criteria:

**Cathodic Protection Areas**

Area	Point	District	Read, V	Criteria
00367-4A	D	La Jolla	-0.545	-0.850 V
00377-2A	J	La Jolla	-0.586	-0.850 V
00377-2A	P	La Jolla	-0.593	-0.850 V
00622-4A	A	La Jolla	-0.670	-0.850 V
00622-4A	B	La Jolla	-0.640	-0.850 V
00706-3A	C	La Jolla	-0.847	-0.850 V
00706-3A	E	La Jolla	-0.840	-0.850 V
00825-2A	B	La Jolla	-0.839	-0.850 V
00825-2A	C	La Jolla	-0.820	-0.850 V
00412-3B	V	Anaheim	-0.567	-0.850 V
00510-3A	C	Anaheim	-0.748	-0.850 V
00631-1A	C	Anaheim	-0.834	-0.850 V
00631-1A	D	Anaheim	-0.830	-0.850 V
00464-2B	Q	Anaheim	-0.835	-0.850 V
00464-2B	R	Anaheim	-0.801	-0.850 V
LA-0573-1-B	T	Whittier	-0.705	-0.850 V
LA-0573-1-B	W	Whittier	-0.772	-0.850 V
LA-0673-3-B	B	Whittier	-0.465	-0.850 V
LA-0673-3-B	C	Whittier	-0.460	-0.850 V
00296-4A	C	Whittier	-0.720	-0.850 V
00296-4A	H	Whittier	-0.672	-0.850 V
C-0743-E-C	I	Whittier	-0.729	-0.850 V
C-0649-E-A	B	Downey	-0.566	-0.850 V

C-0766-E-B	B	Downey	-0.523	-0.850 V
C-0872-E-E	L	Downey	-0.837	-0.850 V
SL-C0825-EC	G	Downey	-0.724	-0.850 V

Also, the test points under CP 10% inspection cycles indicated low reads as well.

#### **CP 10 Inspections**

Address	Region	District	Read, V	Criteria
909 N. Main St, Santa Ana	Southeast	Anaheim	-0.140	-0.850 V
13461 Jetmore Ave, Paramount	Southeast	Downey	-0.395	-0.850 V
15919 Orizaba Ave, Paramount	Southeast	Downey	-0.407	-0.850 V

SED directs SCG to take necessary remediation actions, so that SoCalGas can restore the cathodic protection to the affected sections and comply with 49 CFR §192.463.

#### **Response**

SoCalGas has provided an update to the above referenced locations in the tables below.

#### **Cathodic Protection Areas**

Area	Point	Audit Read 2015 (V)	Criteria	Date Read Up	Up Read (V)	Remediation
00367-4A	D	-0.545	-0.850 V	3/10/2016	-0.908	Aboveground short cleared and new anodes installed.
00377-2A	J	-0.586	-0.850 V	2/3/2016	-1.018	Aboveground shorts cleared
00377-2A	P	-0.593	-0.850 V	2/3/2016	-1.031	Aboveground shorts cleared
00622-4A	A	-0.67	-0.850 V	5/14/2015	-1.104	Galvanic area converted to new impressed current system.
00622-4A	B	-0.64	-0.850 V	5/14/2015	-1.067	Galvanic area converted to new impressed current system.
00706-3A	C	-0.847	-0.850 V	7/20/2015	-0.957	Underground short cleared
00706-3A	E	-0.84	-0.850 V	7/20/2015	-0.964	Underground short cleared
00825-2A	B	-0.839	-0.850 V	12/21/2015	-0.965	Underground short cleared and new anodes installed.
00825-2A	C	-0.82	-0.850 V	12/21/2015	-0.928	Underground short cleared and new anodes installed.
00412-3B	V	-0.567	-0.850 V	10/24/2015	-0.910	Aboveground short cleared
00510-3A	C	-0.748	-0.850 V	3/8/2016	-0.855	New Anodes installed

00631-1A	C	-0.834	-0.850 V	3/21/2016	-0.905	New anodes installed
00631-1A	D	-0.83	-0.850 V	3/21/2016	-0.944	New anodes installed
00464-2B	Q	-0.835	-0.850 V	7/10/2015	-0.933	Underground short cleared.
00464-2B	R	-0.801	-0.850 V	7/10/2015	-0.940	Underground short cleared.
LA-0573-1-B	T	-0.705	-0.850 V	3/3/2016	-0.934	Read area up during troubleshooting.
LA-0573-1-B	W	-0.772	-0.850 V	3/3/2016	-0.994	Read area up during troubleshooting.
LA-0673-3-B	B	-0.465	-0.850 V	6/17/2015	-0.870	Aboveground short cleared
LA-0673-3-B	C	-0.46	-0.850 V	6/17/2015	-0.888	Aboveground short cleared
00296-4A	C	-0.72	-0.850 V	7/3/2015	-1.144	Aboveground short cleared
00296-4A	H	-0.672	-0.850 V	7/3/2015	-1.179	Aboveground short cleared
C-0743-E-C	I	-0.729	100 mV Shift	N/A	N/A	Area was NOT down. After reviewing the package it was found that the Lower Tolerance for Point A should have been - 0.579 (per the 100mV worksheet)
C-0649-E-A	B	-0.566	-0.850 V	12/15/2015	-0.980	New anodes installed
C-0766-E-B	B	-0.523	-0.850 V	5/17/2016	-0.900	New anodes installed
C-0872-E-E	L	-0.837	-0.850 V	1/15/2016	-0.868	Cleaned and re-connected bonds.
SL-C0825-EC	G	-0.724	-0.850 V	9/23/2015	-1.238	Aboveground short cleared.

### **CP 10 Inspections**

Location	Audit Read 2015 (V)	Lower Limit	SoCal Last (V)	Date Read Up	Up Read (V)	Remediation
909 N. Main St, Santa Ana	-0.815	-0.850 V	-0.140	6/29/2016	-1.58	1lb anode installed.
13461 Jetmore Ave, Paramount	-0.428	-0.850 V	-0.395	6/29/2016	-1.10	1lb anode installed.
15919 Orizaba Ave, Paramount	-0.304	-0.850 V	-0.407	N/A	N/A	This service should not have been listed as a CP10. This steel service was installed in 1958 and is supplied by a 2" steel main installed in 1955. In 2013 it was converted from a "Branch" to a "Standard" service, causing it to be added to the CP10 program in error. The records for this service have since been corrected.

## **2. §192.465 (d) External corrosion control: Monitoring**

*“Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring.”*

During the records review, SED found that SoCalGas crew found a CP package 00860-1A down on May 5, 2014 and noted that the anode was depleted at ECS #1. On May 30, 2014, crew decided to install new anodes at ECS #1. SoCalGas’ Maintenance Sheet showed that the permit for installation of anode was submitted to the County of Orange on June 10, 2014. On July 23, 2014, it was found that the permit was delayed because the county required a Traffic Control Plan. However, the maintenance sheet did not indicate the submittal of the Traffic Control Plan to the county. On May 4, 2015, it showed that the area was up. Apparently, the Traffic Control Plan was not needed during the permitting process. However, the affected CP package was receiving insufficient cathodic protection for almost a year. Therefore, SED recommends SoCalGas take prompt remedial actions to address its cathodic protection deficiencies without delay.

### **SCG Response**

SoCalGas understands and takes the SED recommendation very seriously. SoCalGas did take prompt remedial action per Gas Standard 186.0135 / Operation and Maintenance of Cathodic Protection Facilities. Troubleshooting for CP area 00860-1A commenced on May 5, 2014, 28 days from date the area was determined to be out-of-tolerance<sup>2</sup>. The remediation plan, initiated on May 30, 2014, was to install new anodes; however, SoCalGas experienced difficulties in getting the permit and traffic control plan approved by the county for the original installation location. After the county rejected SoCalGas’ traffic control plans twice, in order to move forward with remediation work for this area, SoCalGas revised the remediation plan, and the anode installations were relocated to be on a private street where traffic control plans were not required. The CP area was subsequently brought back within tolerance May 5, 2015<sup>3</sup>.

SoCalGas continues to work with local municipalities to streamline and expedite permitting processes. SoCalGas Operations requests assistance from Regional Public Affairs when experiencing longer than normal permitting delays/issues.

## **3. §192.465 (c) Atmospheric corrosion control: Monitoring**

*“If atmospheric corrosion is found during an inspection, the operator must provide protection against the corrosion as required by Sec. 192.479.”*

During the field inspection, SED found severe atmospheric corrosion at the following locations:

- i) Riser at 5328 Magnolia Terrace, Whittier
- ii) Service line branch at 909 N. Main St, Santa Ana

Therefore, SED recommends SCG take prompt remediation.

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<sup>2</sup> Please note that this area was found to be out-of-tolerance on April 7, 2014, not May 5, 2014 as stated by SED.

<sup>3</sup> Please note that this area was brought into tolerance on May 5, 2015, not May 4, 2015 as stated by SED.

**SCG Response**

SoCalGas remediated the issue by painting the facilities at 5328 Magnolia Terrace in the City of Whittier. The order was completed on June 10, 2015 and was worked on service order 842872507.

SoCalGas reviewed all audit notes and the daily audit log and found no mention of a condition observed at 909 N. Main St. in Santa Ana. As a precautionary measure a SoCalGas supervisor and represented employee visited this site on July 5, 2016 and painted the fittings on the MSA, even though significant corrosion was not observed.